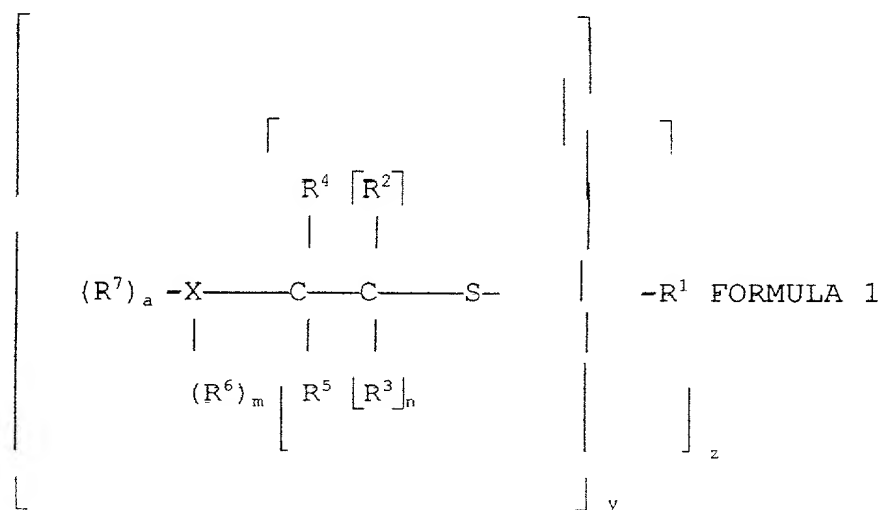


The subject matter claimed is:

1. A polymer composition normally susceptible to heat-induced decomposition comprising a halogen-containing polymer, the degradation products of a blocked mercaptan present during processing of the composition at an elevated temperature, said products including a free mercaptan; said blocked mercaptan having the structure:



wherein a is 0 or 1, m and n are 0 or 1; y = 1 to 4; when y = 1, z is 1 to 4; and when y is more than 1, z is 1; R¹ is an alkyl, alkylenyl, cycloalkyl, cycloalkylenyl, aryl, alkaryl, aralkyl, aralkylenyl, hydroxyalkyl, dihydroxyalkyl, hydroxy(polyalkoxy)alkyl, alkoxyalkyl, hydroxyalkoxyalkyl, alkoxy(hydroxyalkyl), alkoxy(acyloxyalkyl), alkoxy(polyalkoxy)alkyl, alkoxy(polyalkoxy)carbonylalkyl, carboxyalkyl, acyloxyalkyl, acyloxy(hydroxyalkyl), acyloxyalkoxyalkyl, acyloxy(polyalkoxy)alkyl, benzoyloxy(polyalkoxy)alkyl, alkylenebis-(acyloxyalkyl), alkoxycarbonylalkyl, alkoxycarbonylalkylenyl,

hydroxyalkoxycarbonylalkyl, hydroxy(polyalkoxy)carbonylalkyl, mercaptoalkyl, mercaptoalkylenyl, mercaptoalkoxycarbonylalkyl, mercaptoalkoxycarbonylalkylenyl, alkoxycarbonyl(amido)alkyl, alkylcarbonyloxy(polyalkoxy)carbonylalkyl, tetrahydropyranyloxy(polyalkoxy)carbonylalkyl, tetrahydropyranyloxyalkyl, hydroxyaryl, mercaptoaryl or carboxyaryl radical having from 1 to 22 carbon atoms; R^2 , R^3 , R^4 , R^5 , R^6 , and R^7 are independently hydrogen, a hydroxyl, mercapto, acyl, alkyl, alkylenyl, aryl, haloaryl, alkaryl, aralkyl, hydroxyalkyl, mercaptoalkyl, hydroxyaryl, alkoxyaryl, alkoxyhydroxyaryl, mercaptoaryl groups having from 1 to 22 carbon atoms; X is aryl, haloaryl, alkaryl, hydroxyaryl, dihydroxyaryl, alkoxyaryl, arylcycloalkyl, or a heteroatom, with the option that when a is 1 and m is 1, R^6 and R^7 form a heterocyclic moiety in conjunction with X as nitrogen, and with the further option that when a = 1 and m = 0, one of R^1 , R^3 , and R^5 joins with R^7 and X to form a heterocyclic moiety with X as a heteroatom selected from the group consisting of oxygen and sulfur; with the proviso that z is 1 or 2 when X is aralkaryl, R^6 and R^7 are hydroxyl, a is 1 and m is 1, and with the further proviso that when $R^6 \neq$ hydroxyl or mercapto, z is 1;

from about 0.005 to about 2 phr of a mixture of zinc chloride and a zinc carboxylate; and

from 0 to about 10 phr of at least one co-stabilizer selected from the group consisting of an epoxy compound and an organic phosphite; all based on the weight of the polymer.

2. The composition of claim 1 wherein the amount of the blocked mercaptan is from about 0.05 to about 4 phr, by weight, of the polymer.

3. The composition of claim 2 wherein the amount of the blocked mercaptan is from about 0.1 to about 3 phr.
4. The composition of claim 1 wherein the amounts of zinc carboxylate and zinc chloride in the mixture, expressed as zinc ion, are from about 15 to about 70% and from about 30 to about 85%, respectively, of the total amount of zinc.
5. The composition of claim 1 wherein the amount of the zinc chloride/zinc carboxylate mixture is from about 0.005 to about 1.0 phr.
6. The composition of claim 1 wherein the amount of said co-stabilizer is 0.
7. The composition of claim 1 wherein the amount of the zinc chloride/zinc carboxylate mixture is from about 0.005 to about 0.5 phr.
8. The composition of claim 7 wherein the amount is from about 0.08 to about 0.2 phr.
9. The composition of claim 1 wherein R^1 is an acyloxyalkyl group.
10. The composition of claim 1 wherein R^1 is a hydroxyalkyl group.
11. The composition of claim 1 wherein R^1 is alkoxycarbonyl-alkyl.